



Please type a plus sign (+) inside this box

PTO/SR/05 (1/98) Approved for use through 09/30/2000. OMB 0651-0032 Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

UTILITY PATENT APPLICATION TRANSMITTAL

Attorney Docket No. 0819-321

First Inventor or Application Identifier: Kenya UOMORI et al.

Title: RANGEFINDER AND IMAGER

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Express Mail Label No.

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

ADDRESS TO:

Assistant Commissioner for Patents **Box Patent Application** Washington, DC 20231

Citations

1. [X] Fee Transmittal Form (e.g., PTO/SB/17)

(Submit an original, and a duplicate for fee processing)

2. [X] Specification Total Pages [52]

(preferred arrangement set forth below)

- Descriptive title of the Invention
- Cross References to Related Applications
- Statement Regarding Fed sponsored R & D
- Reference to Microfiche Appendix
- Background of the Invention
- Brief Summary of the Invention
- Brief Description of the Drawings (if filed)
- Detailed Description
- Claim(s)

Signature

- Abstract of the Disclosure
- 3. [X] Drawing(s) (35 USC 113)

Total Sheets [22] Total Pages []

- 4. [] Oath or Declaration a. [] Newly executed (original or copy)
 - b. [] Copy from a prior application (37 CFR 1.63(d)) (for continuation/divisional with Box 17 completed)
 - [Note Box 5 below]

i. [] DELETION OF INVENTOR(S)

Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).

5. [] Incorporation By Reference (useable if Box 4b is checked) The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered to be part of the disclosure of the accompanying application and is hereby incorporated by reference therein.

- 6. [] Microfiche Computer Program (Appendix)
- 7. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
 - a. [] Computer Readable Copy
 - b. [] Paper Copy (identical to computer copy)
 - c. [] Statement verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

- 8. [] Assignment Papers (cover sheet & document(s))
- 9. [] 37 CFR 3.73(b) Statement [] Power of Attorney (when there is an assignee)
- 10. [] English Translation Document (if applicable)
- 11. [X] Information Disclosure Statement [X] Copies of IDS
- (IDS)/PTO-1449 12. [] Preliminary Amendment
- 13. [X] Return Receipt Postcard (MPEP 503)
- (Should be specifically itemized) 14. [] *Small Entity [] Statement filed in prior application,
- Statement(s) Status still proper and desired (PTO/SB/09-12)
- 15. [] Certified Copy of Priority Document(s) (if foreign priority is claimed)
- 16. [X] Other: Sheet of Filing Particulars

Date: December 17, 1999

*A new statement is required to be entitled to pay small entity fees,

s been filed in a prior application and is being			
n below and in a preliminary amendment: ication No. Group/Art Unit:			
18. CORRESPONDENCE ADDRESS			
or [X] Correspondence address below			
02 3-0370			
o. 38,285			

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.



<< APPLICATION in U.S.A. >>

- 1. Title of the invention "RANGEFINDER AND IMAGER"
- 2. Assignee: Matsushita Electric Industrial Co., Ltd. Address: 1006, Oaza Kadoma, Kadoma-shi, Osaka 571-8501, Japan
- Inventor(s) (4 persons)

1-3-18, Koda, Hirakata-shi, Osaka 573-0073, Japan ① Kenya UOMORI:

88-B101, Aono-cho, Nara-shi, Nara 631-0841, Japan ② Takeo AZUMA:

16-1-811, Joshoji-cho, Kadoma-shi, ③ Kunio NOBORI:

Osaka 571-0063, Japan

4-14-8, Nishitomigaoka, Nara-shi, 4 Atsushi MORIMURA:

Nara 631-0006, Japan

- Convention Priority Claim 4. Japanese Application Number Filing Date YES X NO December 22, 1998 ① 10-365688 for patent
- 5. Reference(s) for IDS
- ① Andrew Gruss et. al., "A VLSI Smart Sensor for Fast Range Imaging", proceedings of the 1992 IEEE/RSJ International Conference on Intelligent Robots and Systems, July 7, 1992
- ② Kazuyuki Hattori et. al., "Handy Rangefinder for Active Robot Vision", proceedings of the 1995 IEEE International Conference on Robotics and Automation, 1995